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NATIONAL MARINE FISHERIES SERVICE
OFFICE OF SCIENCE AND TECHNOLOGY FISHERIES STATISTICS AND ECONOMICS
(F/ST1)
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FISHERIES INFORMATION SYSTEM (FIS) / PROFESSIONAL SPECIALTY GROUPS (PSGs) POLICY

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1. PURPOSE: This FIS Policy is intended to provide guidance for the functioning of Professional Specialty Groups (PSGs). Collectively, PSGs, composed of headquarters, region and center business and technical experts, will oversee all aspects of the implementation of a Fisheries Information System (FIS) consistent with the system objectives identified in the 1998 Sustainable Fisheries Act Report to Congress and the following overall FIS goals:

- Facilitate coordination and communication in the design, collection, sharing, and uses of data among states, regional/state repositories, and NMFS to support fisheries stewardship.
- Consolidate information collected under existing State, Federal and international fishery management plans.
- Build cross-regional and national tools to support data collection and metadata activities at the Regions and Centers.
- Develop a unified electronic data management system that provides information about participation in fisheries across NMFS Regions.
- Expand data collection to meet future needs.
- Improve data quality by avoiding duplication and unnecessary redundancy in data collection.

2. BACKGROUND: Regional fishery management (NMFS) system development efforts, generally in response to immediate needs produced by the management process, have too frequently resulted in regional information systems which failed to meet the needs of end users and could not share or access information in related systems. This often resulted because information technology professionals were under short deadlines and were directed by special purpose ad-hoc groups. In addition, fishery management systems need to satisfy the requirements of the 2001 Data Quality Act, as specified in NOAA's 2002 Information Quality Guidelines, to ensure the quality, objectivity, utility, and integrity of disseminated information.

In 1998, NMFS began strategic planning for FIS – a decentralized integrated information system to increase total coordination across all NMFS center and region offices for planning, budgeting, and operation. In 2002, Congress approved partial funding for implementation of FIS. As a result of FIS, NMFS staff at all organizational levels will become progressively more involved in information systems requirements analyses, management, coordination of shared software development, common codes, common of data elements, hardware procurement and end-user orientation and training.

3. POLICY: In order to support the decentralized development of the FIS, PSGs will be formed to articulate the information needs of the various disciplines within NMFS, to ensure that the requirements of regional/center/other constituents (including state partners) are addressed in system development plans and assure that functional requirements are being met in systems proposed for distribution NMFS-wide.

4. FIS PSG GOALS:

The following goals will be shared across all PSGs as they work to implement various components of FIS.

- o Build national fisheries information expert teams to share ideas, successes and experiences in the management of Fisheries information.
- o Ensure the transparency, quality, integrity, and utility of Fisheries data through the development of FIS policies, processes, and best practices.
- o Maximize the efficiency and cost effectiveness of Fisheries data by building cross-regional and national level information systems and resources.
- o Consult with business area and technical experts, both internal and external, that can provide guidance, mentorship and training in the development of regional, cross-regional and national information management tools and services.
- o Operate as the core team through communication, collaboration, and cooperation to refine and pursue the goals and objectives of FIS.

5. MEMBERSHIP: The PSG members will share a common interest and expertise in business and technical practice in the designated subject area. PSGs will include members with subject expertise in both business management and information technology. Membership presumes

active and constructive engagement in a consensus process that must incrementally improve systems and business practice documentation in compliance with the 2001 Data Quality Act. The members will provide leadership for their PSG topical area, but they may also draw on other staff resources to achieve their objectives. An individual can only be a member of one PSG but may actively support the goals and projects of more than one. PSG membership will be limited to a maximum of 16 persons, with a general goal of representing each regional/science center and relevant headquarters functions.

6. PSG PROCEDURES: Region and Science Center offices and the Office of Science and Technology (ST) are jointly responsible for ensuring that systems developed under this initiative support all regional fishery management requirements and satisfy the information quality guidelines.

All of these offices will be represented on the FIS System Design and Integration PSG, which will be responsible for oversight of PSG project life cycles, data models, documentation, data quality, system design and architecture. The FIS System Design and Integration PSG will provide all necessary PSG organizational and administrative support. Each PSG's chair and co-chair need to communicate with the FIS System Design and Integration PSG about their major activities, including out-year planning, travel arrangements for conferences and meetings, and maintenance of documentation. The FIS System Design and Integration PSG will monitor all PSG activities.

The PSG chairperson and co-chairperson will facilitate PSG discussion, ensure that members collaborate to achieve results, and track PSG progress. PSG meetings can be scheduled as needed. In addition, the FIS System Design and Integration PSG and other PSGs will plan to have at least one meeting per year.

7. RESOURCES: Resource needs for each PSG should be identified by each PSG. Based on budget availability, resources will be provided by FIS. ST/FIS project management, along with the PSGs, will resolve issues of systems development priority which arise as various PSGs compete for scarce information system development resources.

8. PSG DUTIES AND RESPONSIBILITIES: The primary responsibility of each PSG is to make their relevant portion of the FIS as functionally complete as possible within the limitations of resource availability. PSGs will focus on common business tasks (permits, landings, logbooks, biological sampling, observers, etc.). The duties of a PSG include:

1. Build a team with the right balance of business and technical experts to achieve the PSG objectives.
2. Develop and monitor an action plan, with assigned responsibilities, that is consistent with overall FIS goals and objectives.
3. Define an inclusive set of regional, cross-regional, and national electronic information management tools and services.

4. Follow the standard IT software development life cycle methodology to oversee all aspects of application development from initial planning through implementation, operation, and maintenance.

9. PSG MEMBER RESPONSIBILITIES: Each PSG member is critical to achieving the PSG's objectives. The responsibilities of a PSG member include:

1. Communicate with other members of the PSG, especially with counterparts within the regional program office, to keep them aware and involved. A PSG should communicate with other PSGs and with the FIS System Design and Integration PSG to get concurrence and approval, respectively, for proposed standardized designs and definitions. PSGs should prepare meeting minutes and distribute them and other key correspondence to the FIS System Design and Integration PSG and other PSGs.
2. Work collaboratively with their peers and with the FIS System Design and Integration PSG and other PSGs to review current regional and Headquarters information management systems to determine the adequacy and appropriateness of those systems towards satisfying the business functional requirements and specifications of FIS and the 2001 Data Quality Act. PSGs will identify and define common data elements contained within business specific applications.
3. Identify functional requirements and associated functional specifications for modifications to or the development of new business-specific information systems. Create functional requirements documentation reflecting application specification in sufficient detail to guide programmers during the development phase.
4. Communicate, collaborate and cooperate with each other.

10. GROUND RULES: Each PSG will need to meet to plan projects, to solve problems and to assess progress. PSG members should follow some basic ground rules for those discussions.

A key ground rule is that PSGs should operate based on consensus. Since there will be several individual views on how a PSG might best proceed, *consensus* means, "I can live with that and support it" – it does not necessarily mean, "I think this is the best solution."

Other general ground rules that PSGs should follow when meeting or communicating include:

- Turn off cell phones
- Use an agenda with clear meeting objectives; each meeting must have a goal(s).
- Start and end on time
- Everyone contributes
- Take meeting minutes
- Make a point succinctly; then elaborate on it
- Respect the speaker – no personal attacks

- Leave the meeting with clear assignments and expectations
- Do homework and come to meeting with the answers of action item assigned
- Record decisions, actions/responsible member(s), and issues to defer
- Ask for clarification if a term or concept is unclear
- Avoid sidebar discussions

In addition to these ground rules, individual PSGs may wish to adopt ground rules unique to their group or focus.

11. PROPOSED FY 2004 PSGs:

a) *FIS System Design and Integration PSG (metadata, unified system)* – This overarching PSG is responsible for ensuring that the goals and objectives identified in the 1999 SFA Report to Congress are achieved. Specific charges or areas of responsibility include identifying a national FIS view for integration of regional detailed data to support appropriate national summarization and access objectives. This PSG is responsible for ensuring the integration of technical and functional requirements across the other PSGs. Specific areas of responsibility include overseeing the integration of project data models, system design architecture, and standards for documentation, metadata, and change management across PSGs that satisfy the 2001 Data Quality Act. This PSG will review the business practice specific-plans to identify areas where information content may affect other projects. This group will review the business practice PSG plans and budgets and assist in priority setting relative to sequencing work between groups and funding availability, ensuring extensive communication within and between PSGs. This group will create an implementation plan based on the initial consensus FIS goals and existing system capabilities. This is the core group that will oversee the activities of all other PSGs.

b) *Permits & Unique Identification PSG* – Issuing permits is a mission critical function of the NMFS. The data collected by permit systems provides the critical elements necessary to track people, companies, and vessels as they participate across time and space in federal and state fisheries. Participation needs to be traceable across time, vessels, and fisheries to satisfy the FIS mandate. This PSG will also work closely with the FIS System Design and Integration PSG and other PSGs to ensure the collaboration, coordination, and communication across the PSGs.

c) *Landings & Logbook Reconciliation PSG* – Comparable data may be collected from many sources through various reporting requirements. Dealer reports of landings and vessel logbook data are both reported to NMFS for some fisheries. In some cases, states may collect comparable information. This PSG will examine reconciliation of reports of comparable data to assure the highest data quality for various users. This PSG will also work closely with the FIS System Design and Integration PSG and other PSGs to ensure the collaboration, coordination, and communication across the PSGs.

d) *Electronic Reporting - Dealer and Vessel based systems PSG* – Data collection and reporting are fundamental to NMFS management goals. Electronic reporting ensures timely catch statistics that meet the needs of Agencies tasked with oversight, management and enforcement. Successful email based electronic reporting systems are in place transmitting dealer and landing reports, and there are pilots of internet-based systems. Electronic reporting

applications reduce redundant reporting and improve data quality while fulfilling fishery regulations and confidentiality requirements. This PSG will identify and promote data collection systems that consider the business constraints of industry, are platform independent, and harmonize the data collection interface. This PSG will also work closely with the FIS System Design and Integration PSG and other PSGs to ensure the collaboration, coordination, and communication across the PSGs.